

ABSTRACT

[0027] Diffraction which is used to measure features on a substrate layer is disclosed. A substrate, such as a mask structure for microelectronics or a semiconductor substrate with reflective or transmissive features, is irradiated by a source emitting radiation of known wavelength at an angle of incidence relative to the substrate. Given a known pitch, the width of the features themselves is measured by analyzing a diffraction pattern by computer after capturing characteristics of the pattern with a detector.